## REMARKS

Applicants wish to thank the Examiner for considering the present application. Claims 1-15 are pending in the application. The allowability of claim 11, if rewritten in independent form, is acknowledged. Applicants respectfully request the Examiner for a reconsideration of the rejections.

### REJECTION UNDER 35 U.S.C. § 103

Claims 1-10 and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Olds (U.S. Pat. No. 5,732,351) in view of Hart (U.S. Pub. No. 2002/0132579). This rejection is respectfully traversed.

Claim 1 recites a plurality of satellites forming a coordinatable system of geostationary satellite orbits that provides satellite coverage continuously within a specified service area. The claim further recites a tiling pattern for use in the surface of the Earth, said tiling pattern having a plurality of cells corresponding to the plurality of beams, each of said cells having a defined frequency for communication and a frequency reuse spacing, wherein at least one beam forms from a first of the plurality of satellites is directed to a group of cells formed from a second of the plurality of satellites. The claim was amended to include that at least one beam has a different frequency than each corresponding cell from the group of cells formed from the second of the plurality of satellites.

The Olds reference is cited for teaching geostationary satellites. Although geostationary satellites are set forth in column 4, the old reference is suited for medium and low Earth orbit applications. Applicants admit that a tiling pattern is illustrated in Figure 2 of the Olds reference. However, the Olds reference appears to avoid interference by intentionally directing beams from different satellites to different cells. Claim 1 seeks to provide different coverage using different

frequencies to the same cell from different satellites. This is in sharp contrast to the Olds reference. The Examiner then states that the Olds reference does not mention at least one beam formed from a first of the plurality of satellites directed to a group of cells formed from a second of the plurality of satellites. Applicants agree. The Examiner then cites the Hart reference for these teachings.

The Examiner specifically refers to Figure 2 and Figures 7-9 which correspond to page 4, section 63-63 and page 5, section 73-75 for teaching the plurality of satellites as directed to a group of cells formed from the different satellites. There are several differences from the Hart reference. First, claim 1 is directed to a geostationary satellite system. The Hart reference does not teach or suggest the use of satellites in a geostationary orbit. Another difference from the Hart reference is the use of different frequencies in the overlapping cells. The end of paragraph 64 of the Hart reference specifically mentions that, "the mobile terminal 18 is located within the footprint 50 of one spot beam of the satellite 4a and within the footprint 51 of a spot beam of the satellite 4b, so that communication is possible via either satellite." As described in the next several paragraphs, it appears that the same frequencies are assigned so that communication can take place using either of the satellites. This facilitates handover described in paragraphs 72 through 74. Handover is important when one satellite moves from the view of the user terminal. The present claims use different frequencies for overlapping coverage. As an aside, the handover aspect illustrates the difference between a lower Earth orbit satellite and a geostationary Earth orbit satellite as recited in claim 1.

Claims 2 through 10 are believed to be allowable for the same reasons set forth above with respect to claim 1.

Claims 12 and 13 recite regularly distributed rings. The Examiner points to Olds, Figure 2, for a distributed cell ring. However, Applicants can find no teaching or suggestion in the Olds

reference for a distributed cell ring. The Examiner also points to column 4, lines 10-15 of the Olds reference for this teaching. However, this passage also does not teach or suggest regularly distributed rings. Applicants respectfully request the Examiner to reconsider this rejection as well.

Claims 14 and 15 are independent claims that have been amended in a similar manner to that described above with respect to claim 1. Claims 14 and 15 do not recite the geostationary orbits but recite different frequency use in the same cells that originate from different satellites. As mentioned above, these features are not taught or suggested in either the Olds or the Hart references. Therefore, claims 14 and 15 are also believed to be allowable for the same reasons set forth above.

## ALLOWABLE SUBJECT MATTER

The Examiner states that claim 11 would be allowable if rewritten in independent form. Accordingly, Applicants have amended claim 11 to include the limitations of the base claim and any intervening claims. Therefore, claim 11 should now be in condition for allowance.

## CONCLUSION

In light of the remarks above, Applicants submit that all objections and rejections are now overcome. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, the Examiner is respectfully requested to contact the undersigned attorney.

Should any fees be associated with this submission, please charge Deposit Account 50-0383.

Respectfully submitted,

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